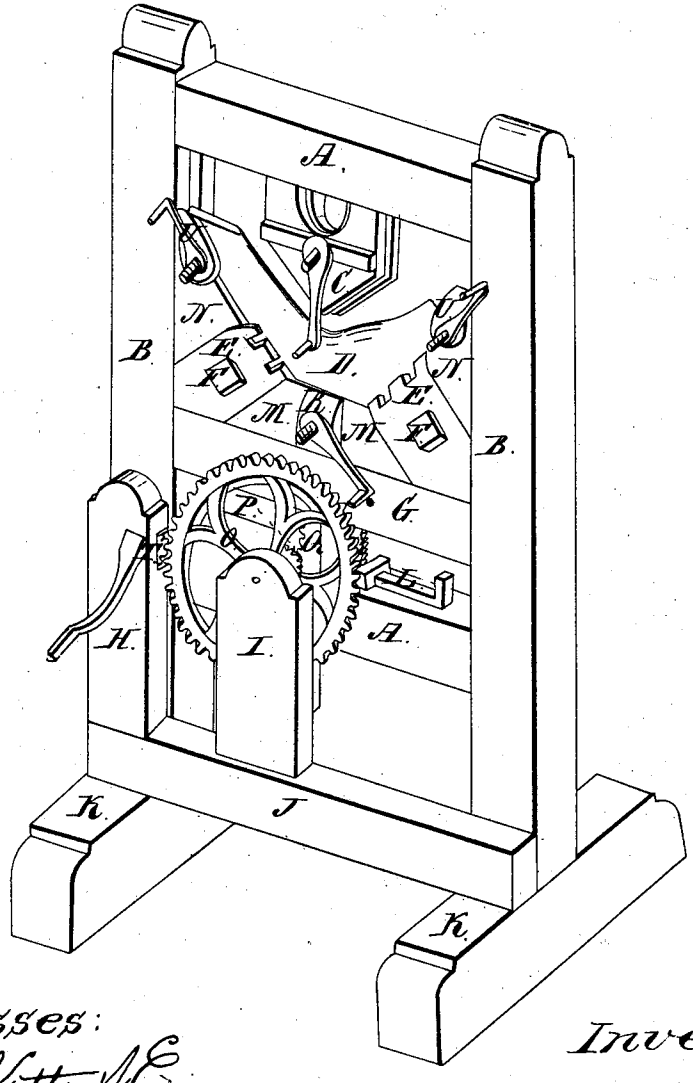
J. Adams,

Boot Crimp,

No. 656. Patented Mar. 26, 1838.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOSEPH ADAMS, OF FAIRHAVEN, VERMONT.

MACHINE FOR CRIMPING LEATHER FOR BOOTS, &c.

Specification of Letters Patent No. 656, dated March 26, 1838; Antedated September 26, 1837.

To all whom it may concern:

Be it known that I, JOSEPH ADAMS, of Fairhaven, in the county of Rutland and State of Vermont, have invented a new and useful Machine for Crimping Boot-Fronts; and I do hereby declare the following is a full and exact description.

The nature of my invention consists in the construction and combination of jaws and carriage for a boot crimp to rest on with a double vise castiron wheel and pinions and cranks, and rack so attached as to work the whole of the machine so as to produce the intended effect of crimping boot fronts.

To enable others to make and use my invention I will proceed to describe its construction and operation.

I construct the frame of my machine in the following manner: Two posts four feet seven inches long and two inches and a half square (as shown by letter B in the drawing) and worked into two sills, eighteen inches long of the same dimensions of the posts (shown by letter K) and connected by a girth twenty one inches long of the same dimension, about three inches from the top of the posts and (shown by letter A) and by another girth of the same dimensions (also shown by letter A) about eighteen inches from the bottom of said posts, two wooden jaws ten inches wide and twelve long (as shown by letter C) and framed into the upper girth near the center and pointed at the lower end to fit the crimp, the point of said jaws to hang directly over the angle or curve of the crimp hereafter mentioned. These jaws are supported by two braces of convenient size. To prevent them from splitting an iron bolt about three quarters of an inch is passed through the jaws and braces about seven inches from the points of said jaws with a square flat head on the back side and sunk in to the brace to keep it from turning and a screw on the other end, with a crank about six inches long, and nut on the end, to shut the jaws, which are set in the girth so as to make them slightly movable, so as they may open and shut, a straight spring of sufficient strength is inserted between the jaws so as not to infringe with the bolt and action of the machine, for the purpose of opening them, with cresases in the inside of the jaws, to force the leather on to the crimp, a carriage constructed of bed work (as shown by the letters M and N) and framed into a bed piece of the same size of the posts (as shown by letter G) and runs in grooves in the posts between the two girths, a crimp after the form ordinarily used by cordwainners (shown by letter D) about half an inch thick is placed on the bedwork, which is made of plank of the same thickness of the bed piece and fitted to the crimp with gones is, the bed work at each end of the crimp and center, to receive the said crimp and keep it in its place. Two pairs of reversed jaws indented into the heel work at right angles from the crimp (as shown by the letters E) of similar shape of the others with hooking crimps on the instep to extend the leather and shut in the same manner of the upper jaws, as shown by the letters F on the head of the bolts, and small spiral springs inserted between the jaws just below the bolt to throw them open, with a small girth of wood at the bottom of the jaws working at each end like a hinge to keep the lower end of the jaws from spreading so as to extend the top or mouth of the jaws to receive the crimp and leather, with a piece cut out of the bedwork for the girth and bolt to work in, a cast iron rack is attached to the bed piece (as shown by letter Q) about an inch and a quarter wide of sufficient thickness, with half inch cogs, and passes down through the lower girth. This rack is moved by a pinion wheel (as shown by letter P) of 3 inches and a half spangler sunk into the lower girth so as to connect with the rails, a shaft passes through the pinion and a wheel of about fifteen inches diameter (as shown by O) and one end of the shaft resting on the girth and the other on a standard (as shown by letter I) and mortised into a cross piece resting on the sills as shown by letter J and turned by a crank twelve or fourteen inches long attached to the shaft that passes through a pinion two inches and a half diameter shown by letter T connected with the wheel (O) and resting on a standard (as shown by letter H) attached to the left post by a bolt and framed into the piece resting on the sills a double cast iron vise (as shown by letter R) of four inches and a half head and nine inches shank inserted in the bedwork to the right of the center of the rack, the shank pases down through the bed piece and lower girth containing two sets of teeth indented at the top, with an open-

ing in the center three inches long to receive the crimp the jaws of the vise working at the bottom of the head on a hinge, an iron rod about three eighths of an inch square passes through the vise horizontally two and a half inches from the top and movable. Secured with a nut and screw on one side and secured with a small crank and nut on the other end to shut the vise with two common straight springs inserted between the jaws of the vise to throw them open. An iron slide six inches long, half an inch wide, and a quarter thick passes through a bolt and staple that fastens it to the lower girth (as shown by letter L) and slides into a notch in the right of the shank of the vise about one inch from the bottom of the shank to hold it fast. Two pairs of clamps (shown by U) attached to the upper sections of the bedwork and shut in the same manner as the jaws to fasten the top and toe of the boot front to prevent its sinking at the instep and ankle in thin tight leather a small slide and spring attached to the lower side of the bed piece, (or spring) to snap into the notches on the right side of the vise to hold it when the corners of the boot is brought to their proper place.

All of the machine must be made of some good durable hard wood, except the castings, and all of the jaws may be faced with sheet brass or copper to make them more durable but is not necessary except for durability.

To make an operation with the above described machine, the leather must be thoroughly wet and doubled in the center and placed in the crimp. Then close the upper jaws with the crank attached for that purpose to a suitable distance to receive the leather and crimp. Then move the carriage up with the crank attached to the pinion T so as to force the leather and crimp between the upper jaws. Then open the jaws and let the carriage fall down and fasten the vise with the slide, attached for that purpose. Then lower the carriage so as to project the rim above the bedwork on each side of the crimp. Then place the corners of the boot front into the vise and fasten them with the crank that shuts the vise. Then raise the carriage until the corners of the boot are brought to their proper plane. Then let the vise loose from the slide and force up the crimp as before to smooth down the wrinkles that may rise. Then raise the reversed jaws so as to bring them full on to the leather and crimp. Then close them with cranks on the end of the bolts marked *f*, and close the upper jaws as before, and force the leather and crimp up in between the upper jaws, which will force the reverse jaws back to their place and the leather is ready to tack on to the crimp and take out of the machine. In case of hard stubborn leather the corners of the boot front had better be brought down by degrees, by drawing the corners of the boot front one or two notches at a time. Then let the vise loose and drive the leather and crimp up into the upper jaws to prevent wrinkles rising in the curve of the crimp, so continue the operation until the corners are brought to their proper plane. Then proceed with the reversed jaws as above.

I claim as my invention, and desire to secure by Letters Patent—

The reversed jaws E, E, constituted and operating substantially as herein described; and I claim them also, in their combination with the jaws C, C, as herein described.

JOSEPH ADAMS.

Witnesses:
ALONSON ALLEN,
JAMES M. CHASE.